

5 **WHAT IS CLAIMED IS:**

1. An apparatus for controlling a microtome and a cooling chamber, which is positioned on the microtome, comprising:
 - 10 a single control unit that integrates both operating elements for the microtome and operating elements for the cooling chamber; and
 - a single display is associated with the control unit, wherein the single display is, dependent from the specific configuration of microtome and cooling chamber, a user interface for the microtome and/or the cooling chamber.
- 15 2. The apparatus as defined in Claim 1, wherein on the display or screen the operating elements are presented to a user.
3. The apparatus as defined in Claim 1, wherein the control unit is configured in such a way that a cooling chamber connected to the microtome is visible on the display; and the control unit modifies or adds to the operating elements
20 presented on the display in accordance with the operating elements for the cooling chamber.
4. The apparatus as defined in Claim 1, wherein at least one input device is
25 connected to the control unit so that the operating elements are assigned in user-defined fashion.
5. The apparatus as defined in Claim 4, wherein the input device is a mouse, a trackball, a keyboard, a PDA, a touch screen, or a joystick.
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6. The apparatus as defined in Claim 1, wherein a detection device is provided that is connected to the control unit and detects a cooling chamber connected to the

5 microtome, and thereby invokes the set of operating elements for the cooling
chamber present in the control unit.

7. The apparatus as defined in Claim 6, wherein the detection device is embodied
as a plug connector, a transponder, a scanner, or a barcode reader.

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